

Date: Sat, 18 Sep 93 04:30:07 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #1110  
To: Info-Hams

Info-Hams Digest                      Sat, 18 Sep 93                      Volume 93 : Issue 1110

Today's Topics:

                                    CW and DSP  
            RTTY software for Flesher 470 or Heath HD3030 TU ???  
                                    writing speed

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.  
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Date: 16 Sep 93 13:39:35  
From: idacrd.ccr-p.ida.org!idacrd!n4hy@uunet.uu.net  
Subject: CW and DSP  
To: info-hams@ucsd.edu

Dana asks:

>An FIR filter can not oscillate. Since an FIR filter has no feedback paths,  
>the conditions for oscillation do not exist. However, I would think that if  
>you build an FIR filter which implements the impulse response of a very high-Q  
>IIR filter which does tend to ring, the FIR will also appear to ring.

>Isn't this true, Bob?

That is the real deal. IIR filters have a feedback path and when they are  
high Q, they have little damping (there ain't no resistor in the path ;-).  
Some energy input in the pass band, even if it is noise causes the feedback  
to work really well for quite a while even when the excitation is gone. An  
FIR filter, having no feedback as you say will not have the ability to nearly

oscillate and with the standard design packages, will not provide large lumps of gain bringing lower level noise power in the passband up several dB making it sound like a noisy oscillator running. You will indeed here colored noise but there is no possibility of unstable or ringing behavior.

Thank you for your post, I think I assumed a better understanding of the qualitative differences between IIR and FIR than you did and that was probably a good thing.

Bob

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Date: 16 Sep 1993 15:33:05 GMT  
From: dog.ee.lbl.gov!agate!usenet.ins.cwru.edu!news.ecn.bgu.edu!  
anaxagoras.ils.nwu.edu!news.acns.nwu.edu!casbah.acns.nwu.edu!  
rdewan@network.ucsd.edu  
Subject: RTTY software for Flesher 470 or Heath HD3030 TU ???  
To: info-hams@ucsd.edu

I just acquired a Heathkit HD3030 (Same a Flesher 470 TU) terminal unit for cw and rtty. I am looking for leads, reviews or views on software to run on an IBM PC Compatible to interface with this unit.

Any leads/comments will be greatly appreciated.

If you have used this or a similar TU, I would greatly appreciate hearing from you.

Thank you.

Rajiv  
aa9ch  
r-dewan@nwu.edu  
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Date: 17 Sep 93 20:37:54 GMT  
From: ogicse!uwm.edu!cs.utexas.edu!gerald@cc.utexas.edu!emx.cc.utexas.edu!not-for-mail@network.ucsd.edu  
Subject: writing speed

To: info-hams@ucsd.edu

randy@cyphyn.radnet.com (Randy someone) says:

>>....I can not write faster than 6-7 WPM...and type even worse!

>>HOW in blazes do people DO 20 wpm writing it down? The copy must look awful!

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I don't believe that you cannot write faster than 6-7 wpm unless you have some physical handicap, as that is one word every 8-10 seconds, and little kids just learning to write can go that fast.

I can copy code in joined-up writing at 35 wpm (both copying and writing fall apart there), and I don't think I am unusual. I do notice, though, when I am lecturing and write stuff on the blackboard, then start to talk about the stuff I wrote down, it can take a long time for most people to stop writing and start listening. Maybe it's just cos they are Texans and talk reeeeeelll sloooow laaaaaahk.

Derek Wills (AA5BT, G3NMX)  
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Date: 16 Sep 93 13:44:01  
From: idacrd.ccr-p.ida.org!idacrd!n4hy@uunet.uu.net  
To: info-hams@ucsd.edu

References <270niu\$53j@news.delphi.com>, <CDBH7B.23s@stortek.com>,  
<7968.2c9753d1@hayes.com>  
Subject : Re: CW and DSP

>I thought only feedback-type filters could ring. (ie IIR filters) I don't  
>see how an FIR filter could ring, and they have linear phase response.

You are correct but the FIR filter will still filter noise energy power in the passband and make it sound like colored noise. However this cannot remotely approach what a really high Q IIR filter can do when excited with energy in its passband. Because of the TINY coefficients need in high Q IIR filters in DSP designs to have gains down near 1 (so the thing doesn't run away with you), you lose a fair amount of the dynamic range. On 16 bit DSP processors, such as TMS32C15, I find this to be totally unacceptable

and do all kinds of grouping, shifting tricks, etc. to try and preserve some of the needed precision.

The bottom line to me is, if you have the horsepower use an FIR filter for your really narrow filters.

Bob

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Date: Thu, 16 Sep 1993 17:50:34 GMT  
From: netcomsv!netcom.com!dparker@decwrl.dec.com  
To: info-hams@ucsd.edu

References <1ckT0B1w165w@amanda.jpunix.com>,  
<1993Sep14.185007.21606@cyphyn.radnet.com>, <john.748060107@misty>  
Subject : Re: Neighborhood watch groups

>>: Or...establish your OWN repeater.

>

>>OH? On what freqs? There are none left that won't QRM existing ones.

>

>I don't think a repeater is needed. Most neighborhood watch groups only cover  
>an area of less than 1/2 mile in extent, so HT's should work fine, and if  
>needed, a base station could handle relays.

How about one of those simplex repeaters? Would this be good/bad idea?

Dave/KD6RRS

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\* Dave Parker: e-mail: dparker@netcom.com \*  
\* \*  
\* "Tracy, California....the gateway to Stockton" \*  
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End of Info-Hams Digest V93 #1110

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